

## **REMARKS**

### **I. THE ABSTRACT**

The Examiner objected to the abstract because it allegedly did not reflect the invention or show the “gist of the technical disclosure.” The Applicant respectfully disagrees with the Examiner’s position. The abstract clearly defines the scope of the invention as including technology directed to the “transmission of information packets between a mobile node and a virtual private network.” That scope is supported in the technical disclosure and it is claimed in the present claims.

Further, the encapsulation and de-capsulation of the information packets is shown in the technical disclosure and graphically demonstrated in Figures 5, 5A, 7, 7A, 9, 11 and 13. Moreover, the abstract states that a “home agent on the virtual private network supports transmitting the information packets, and the information packets are transmitted from the virtual private network from the home agent or a virtual private network gateway.”

As with the prior statements, this scope of the invention is supported in the technical disclosure and many of these aspects are explicitly claimed in the present claims. For the foregoing reasons, it is respectfully requested that the objection to the abstract be withdrawn.

## **II. AMENDED CLAIM 8**

Claims 8 has been amended to reflect the proper antecedent basis for the foreign network referenced in line 13 and therefore it is believed that the Examiner's objection to this claim has been overcome.

## **III. CLAIMS 1-20 ARE BELIEVED TO BE ALLOWABLE OVER THE IYER, VAARALA and O'NEILL REFERENCES**

The Examiner has rejected claims 1-20 under the Iyer reference by itself or in combination with the Vaarla and/or O'Neill references. Namely, the Examiner rejected Claims 8-10 under 35 U.S.C. §102(e) as allegedly anticipated by Iyer U.S. Publication 2004/0073642 (hereafter "Iyer"), Claims 1-3, 5-7, 11, 13-15 under 35 U.S.C. §103(a) as allegedly unpatentable over Iyer in view of U.S. Publication 2005/0177722 of Vaarala et al (hereafter "Vaarala"), Claim 4 under 35 U.S.C. §103(a) as allegedly unpatentable over Iyer in view of U.S. Publication 2005/0177722 of Vaarala et al (hereafter "Vaarala"), in further view of O'Neill (U.S. Publication No. 2004/0047322), and Claims 16-20 under 35 U.S.C. §103(a) as allegedly unpatentable over O'Neill in view of Iyer and Vaarala.

The Applicant respectfully disagrees with the Examiner's characterization of Iyer, Vaarala and O'Neill for the following reasons. First, as amended, the claims require the virtual private network to be located on the home network with a home agent thereon, and the inner VPN addresses are used to transfer packets within that virtual private network on the home network or for transferring information packets to the virtual private network gateway that forms the boundary of the home network with the outside networks. The claimed configuration can be clearly shown in the system components shown in Figures 1 and 4, where the VPN designation box encloses the home agent and correspondent node on the home agent.

The present invention is a much different configuration than is shown in the Iyer reference, which is the Examiner's primary reference and which explicitly indicates that a virtual private network is not required on the local area home network where the home agent is located. Namely, in Paragraph 21 of the Iyer reference, that reference states: "[i]n one example, when the MN moves from a network not requiring a VPN tunnel, such as its LAN 3, to a network that does, such as an external network 15, . . ." *Paragraph 21, Iyer, p. 2*. Further, Iyer indicates that the first embodiment "will be described in the context of a mobile node that has a home service

The present invention requires VPN inner addresses on the home network because the VPN is located on the home network. The VPN in the Iyer reference is not located on the home network and does not encompass the home agent or correspondent agent in the Iyer reference. The VPN in Iyer is located outside the home network, which means the inner VPN addresses cannot access the same system elements shown, disclosed and claimed in the present application. Access to these claimed elements allows the claimed invention to achieve efficiencies not otherwise disclosed in the Iyer reference. For example, any VPN tunneling performed outside the home network in Iyer is significantly different from that claimed in the present application and solves a much different problem than is solved by the present invention.

Each of amended claims 1, 8 and 16 explicitly specifies that the home agent and/or correspondent node is located on the virtual private network on the home network, which is also specified in original Claim 10. The claim limitations in Claim 8 regarding the VPN addresses for tunneling information packets to and within the VPN must be construed in light of the VPN's presence on the home network, which is specifically

excluded from the technical disclosure in Iyer. For instance, independent claim 1 has been amended to incorporate limitations relating to the inner tunnel address for the security gateway on the virtual private network, and Claim 16 has been amended to incorporate that same limitation, as well as security gateway address for routing packets to the virtual private network security gateway. All of these limitations must occur on the home network, which is not shown or suggested in the Iyer reference.

The Iyer reference discloses a VPN, but it does not disclose, teach or suggest all the claimed elements, and it does not solve the same issues that arise in the present invention because it does not disclose having a home agent and/or correspondent node on the VPN on the home network. The other two references, O'Neill and Vaarla, fail to disclose, teach or suggest any aspect of operation on a virtual private network. These references, Vaarla and O'Neill, do not suggest, disclose or teach any type of VPN topography, VPN-gateway, security gateway on a VPN, the presence of a home agent and/or correspondent node on a VPN, or the use of an address to tunnel packets to the gateway of a VPN and within a VPN separate from an address used to transmit packets outside the VPN. Therefore, Vaarla and O'Neill fail to overcome the deficiencies of Iyer.

In view of the above, it is believed that Claims 1-20, as amended, are now in condition for allowance. Reconsideration of these claims and an immediate allowance is respectfully requested.

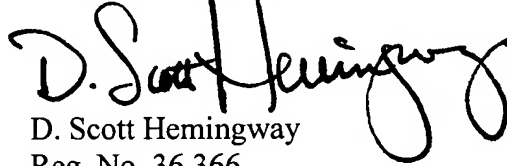
### **III. CONCLUSION**

The claims at issue are distinguishable from the teachings of the cited Iyer, Vaarla and O'Neill references. Independent claims 1, 8, and 16, as amended, are

allowable because the cited references fail to disclose, teach, or suggest all the claimed limitations of the amended independent claims. Since the dependent claims add further limitations to the allowable independent claims, the Applicants believe the dependent claims are likewise allowable. Accordingly, pending claims 1-20 are all believed to be allowable.

It is believed that no fees are necessary for this filing. If additional fees are required for filing this response, then the appropriate fees should be deducted from D. Scott Hemingway's Deposit Account No. 501,270.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "D. Scott Hemingway", with a large, stylized flourish at the end.

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